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ABSTRACT

This study examines both the relationship between teacher evaluation by students and student performance (where students were unaware of course grades), and the role of learner perception of effective teaching styles on those evaluations. Ninty-three graduate students served as subjects for this study. Near the end of the five-week course, the students were asked to respond to a survey designed to assess learner perception of the teaching process. The evaluation instrument was comprised of four components. The first factor represented attention to the method used in the course. A second factor indicated evaluation of the knowledge of the instructor. The third factor dealt with personal aspects of the instructor. The final factor displayed attention to course content. Results indicate a positive relationship between achievement and four evaluation components and offer evidence of the effect learner perceptions have on their evaluation of teaching. Implications for both teacher effectiveness research and research in teacher evaluations are discussed. A list of references for further research is attached. (JD)

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The use of student evaluation of teachers is reported to be common practice at the university level (Snyder and Clair, 1976; Kohlan, 1973). With the increased use of student evaluation has been increased concern regarding issues of validity and the identification of variables affecting the evaluation process (Good and Good, 1973; Tettenbaum, 1975; Snyder and Clair, 1976; Brown, 1976). Social perception theory (Tagiuri, 1969) suggest that the perception of the learner would affect subsequent evaluation of teachers. Tettenbaum (1975) and Crittendon and Norr (1973) present evidence that student perceptions were related to the evaluation process. Similarly, students' intellective and interpersonal style was shown to account for 61% of the variability in learner perception of teaching style (Brown, 1976). It appears, then, that measuring and understanding the relationship between learner perceptions and evaluations of teacher effectiveness could be important to the discussion of the validity of student evaluations.

This study examined the relationship between student perceptions of effective teaching and subsequent evaluation of their teacher. Additionally, since achievement has been shown to be related to evaluations (McKeachie, Lin, and Mann, 1971; Frey, 1973; Gessner, 1973), the relationship between achievement and teacher evaluation was assessed.

Method and Procedures

In an Introduction to Educational Research course, 93 graduate students served as subjects for this study. Near the end of the five week course (approximately 40 contact hours), the students were asked to respond to the Multiple Teacher Factor (MTF) survey (Miller,

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Thompson, and Frankiewicz, 1974) designed to assess learner perception of the teaching process. Specifically, respondents were asked to mark degrees of agreement with 28 adjectives indicating the importance of each in describing a teaching style that would maximize their individual learning. Previous research with the instrument (Miller, et al., 1974; Brown, 1976) has shown that learners array the adjectives across three dimensions describing perceptions of teachers: personal warmth, academic rigor, and intellectual skill. Similar dimensions have been reported in studies examing learner perceptions of the teaching process (Trent and Cohen, 1973). By differentiating themselves with respect to their perceptions of a maximizing teaching style, insight into what learners consider important in a learning situation was measured.

Prior to the final exam, students were asked to evaluate the course using an evaluation form being developed by the author. The form consists of 24 statements reflecting a compilation and modification of a variety of evaluative instruments. Students were assured that the evaluation would not be seen by the instructors prior to course grade assignments. Finally, a multiple-choice final exam covering course concepts was given.

The perception instrument and the evaluation form, respectively, were submitted to principal components analysis with Varimax rotation. The final exam was scored and a KR 20 estimate of reliability was computed to be .84.

Results

The principal components analysis of the MTF yielded three components, accounting for 63% of the total variable variance, which were

rotated to the Varimax criterion. Examination of the factor pattern coefficients confirmed the dimensions of previously discussed: personal warmth, marked by adjectives such as warm, personable and caring; intellectual skill, marked by adjectives such as intelligent and knowledgeable; and academic rigor, marked by adjectives such as thorough, demanding and rigorous. These dimensions are taken to indicate those areas that learners perceive to be important in a learning situation. Factor scores on each of the dimensions were computed for later use in a regression analysis.

Four components, accounting for 71% of total variable variance, of the evaluation instrument were rotated to the Varimax criterion. The first factor represented attention to the method used in the course: "Other courses should be taught this way," and "Things were not explained very well." A second factor indicated evaluation of the knowledge of the instructor: "The instructor did not integrate course material well," and "The instructor demonstrated subject matter expertise." The third factor dealt with personal aspects of the instructor: "The instructor recognized the students as individuals," and "The instructor did not relate well to the students." The final factor displayed attention to course content: "The course material was too difficult," and "The material in this course was worthwhile." Factor scores on each factor were computed.

At this point, relations between exam scores and evaluation factors, and relations between learner perception of teaching style and evaluations were examined using a multiple regression procedure (see Tables 1 and 2).

TABLE 1

MULTIPLE CORRELATION BETWEEN
LEARNER ACHIEVEMENT AND EVALUATION OF TEACHING

Dependent Variable	Independent Variable	Beta Weight	R	R^2
Final Exam	Evaluation Factors			
	Personal Aspects	.53		
	Course Content	.34		
	Instructor Knowledge	.03		
	Method of Instruction	.16		
			.66	.44 ($p<.01$)

TABLE 2

MULTIPLE CORRELATION BETWEEN
LEARNER PERCEPTION AND TEACHER EVALUATION

Evaluation Factors (Dependent Variables)	MTF Dimensions (Independent Variables)				
	Academic Rigor	Personal Warmth	Intellectual Skill		
	Beta Weights			R	R^2
Method of Instruction	.53	.28	.08	.60	.36 ($p<.01$)
Instructor Knowledge	.20	.12	.39	.38	.14 ns
Personal Aspects	.19	.57	.18	.56	.31 ($p<.01$)
Course Content	.54	.09	.36	.50	.25 ($p<.01$)

Discussion

Two major findings of this study have implications for using student evaluations of teachers: the significant positive relation between evaluations and a measure of student performance, and the relation of various dimensions of evaluation and learner perceptions toward effective teaching styles.

Positive teacher evaluations have been assailed as a reward from students for receiving good grades. However, in this study, students could only speculate concerning their final grade during the evaluation process. The positive relationship indicates that to some degree students who learned more perceived the teacher as doing a better job, with respect to four, independent, evaluation dimensions. More importantly, the evaluation dimensions accounting for approximately 44% of the variability in achievement gives credence to the relationship of learner perception of what is important and an objective measure of learner performance.

As shown in Table 2, variability in learner evaluation of the instructor could be accounted for by variability in learner perception of effective teaching. As social perception theory would suggest, those attributes that learners considered important in teaching were reflected in their evaluation of teaching. In this study, for example, those students evaluating the instructor high on the method of instructions employed perceived that "academic rigor" was an essential component in teaching, i. e. saw such adjectives as thoroughness, demanding, and rigorous as describing a teaching style most suited to their individual learning style. Those students perceiving "academic rigor" as less important rated the same instructors relatively lower on the

"method of instruction" evaluation component. What exists, then, is that learners evaluate teaching based to some degree on their individual perception of what is important.

With the relationship between achievement and evaluations of instruction established, at least to some degree, and the role of learner perception in influencing those evaluations clarified, implications for both evaluation of instruction research and teacher effectiveness research can be drawn. When considering the use of student evaluation of instructions, awareness of what learners perceive as important is necessary. An instructor perceived as being demanding by students desiring instructor warmth may not receive high evaluations. This may explain why some criticism of student evaluation has been voiced arguing that happy, joking instructors receive higher evaluations. However, it must be considered that an instructor perceived as being happy and joking by students desiring rigor and thoroughness may not fair so well at evaluation time.

In the area of teacher effectiveness research, learner outcomes when teaching style employed and learner perception of what maximizes individual learning are congruent must be considered. If learners evaluate most favorably those teachers perceived as delivering that which the learners desire, do they learn more? Certainly, learner perception in the teacher-learner interaction demands further research.

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